101 Shihr, and the territory described in the paragraph above might well
131 be accepted as the definition of the term Hadhramaut. Eastwards from the Hadhramaut succeed the Mahra country stretching on the coast from Museina'a to Ras Dharbat 'Ali, the boundary of the Aden Protectorate, and Dhufar in Oman which is inhabited by the Qara tribes who are a separate people and speak a separate language from the Mahras.

133 The Wadi Hadhramaut is the key feature of the geography of the country to which it gives its name. North and south of it the land rises to extensive plateaus which form watersheds. The one to the north, about 3,500 feet above sea-level, has a series of wadis draining north into the sands, and another series draining south into the Wadi Hadhramaut. The watershed to the south, consisting in the same way of plateaus, is higher than that to the north, for it rises to some 6,000 feet. From it, the wadis drain north into the Wadi Hadhramaut and south to the sea. This description is typical of that part of the country through which the wadi runs more or less west to east, that is to say, from about Husn al 'Abr to beyond Tarim. Over this stretch the bed of the wadi falls from a little over 2,000 feet above sea-level to a little under. On the 49th Meridian, a little west of Mukalla, there is an approximate depth of 106 miles of wadi, mountain, and steppe land between the sea and the main wadi, and rather more between that wadi and the desert. As the wadi turns to the south-east, however, it of course modifies these proportions, but the country maintains the same general formation.

Climate.

132 The climate of the Hadhramaut is on the whole healthy. On the high plateaus and even in the wadi land of the interior it is fresh and often cold in winter. In summer it is said to be hot but never unendurable. Mukalla probably enjoys a better summer than Aden. A period of forty days of extreme heat, and consequently known as the Arba'inia, begins on 4th May, and there is another period of eight days later in the year.

Heald, who reported on the agriculture of the Hadhramaut in 1921, says :—

> "The rain-fall along the coast is practically nil, some years they have one or two inches, but useless for agriculture, the floods being from the interior rain a long distance from Mukalla; when we were in the district from December to April, we had two or three showers, but every time too small for the rain gauge to measure.
>
> "The climate between October and April is healthy and suitable for travellers, but after that it becomes too hot for day marching; in fact, in April, some of the shut-in wadis were unbearable and we were very glad to leave the interior for the coast. Up in the hills in the winter months, it can be intensely cold."

1: Ingrams G-5 (1934-35)1936 MM2 Hadhramaut MM2

During our visit the maximum and minimum temperatures recorded during stays in the principal towns were as follows :— 132

	Dates inclusive.	Maximum.	Minimum.
Mukalla	31st October to 5th November ...	86·8	75
	21st to 30th December	82	74·5
Shihr ...	20th to 21st December	80·2	73·3
Du'an ...	11th to 13th November	78·8	70·3
Shibam ...	17th to 20th November	84·2	66·8
	21st to 24th November	75·1	62·3
Tarim ...	21st November	75·9	72·9
	2nd to 5th December	88·5	70·3

The lowest temperature we recorded on the whole trip was 37·3 at 6.45 a.m. on 29th November at Sih Rieidat al Kathīr. The highest was 88·5 at 4 p.m. on 5th December at Tarim.

The States of the Hadhramaut.

In Article I of the Qu'aiti-Kathīri agreement of 1918 it is stated that the Qu'aiti Sultan and the Kathīri Sultan "recognize that the province of Hadhramaut shall be one province, the said province being an appanage of the British Empire under the Sultan of Al Shahr and Mukalla." This agreement appears *in extenso* in Appendix II. By it the Kathīri agreed to accept as binding on him the treaty of 1888 between the Qu'aiti and the British Government, which extended British Protection to Mukalla and Shihr and their dependencies, and also accepted the arbitration of the British Government in the settlement of future disputes. 642 648

The Qu'aiti state of Shihr and Mukalla is one of the most important of the Sultanates and Chiefdoms forming the Aden Protectorate. The Sultan receives a nominal stipend of Rs.60 a month from British funds and is entitled to a salute of eleven guns. The present Sultan, His Highness Salih bin Ghalib al Qu'aiti, succeeded his uncle in March 1936. He is recognized as being the ruler of the whole country, but that part of it defined as being Kathīri is autonomous in its domestic affairs and is ruled over by Sultan 'Ali bin Mansur. By virtue of the Qu'aiti-Kathīri agreement, negotiations with the Kathīri Sultanate are conducted through the medium of the Qu'aiti Sultan. 642 631 643

It is necessary, however, to avoid the impression that all the country included in the term Hadhramaut is ruled by Qu'aiti or Kathīri in the same way as obtains in more advanced countries, for such is far from being the case. In both Sultanates there are a number of towns or districts where the Government is absolute, and the central Government appoints Governors who take full responsibility for the affairs of those places. In some cases there are stretches of country including series of villages which are ruled in the same way, but every now and then will be found autonomous towns and villages. These belong to particular tribes or particular families, and the Qu'aiti or Kathīri Governments have no 642 631 641

2:Ingrams G-5 (1934-35)1945 MM2 Hadhramaut MM2

POLITICAL DEVELOPMENT IN THE HADHRAMAUT

HAROLD INGRAMS

INTRODUCTION

To the Arab geographers the Hadhramaut is a province of South Arabia, to the west it remained until 1934 an imperfectly explored part of the peninsula with the chiefs of which Great Britain had had treaty relations since the end of the nineteenth century. From 1934 till the present time it has been my good fortune to explore it, to live in it and to be associated with its political development.

Politically it consists of six treaty areas, the Qu'aiti State of Shihr and Mukalla, the Kathiri State of Seiyun, the two Wahidi Sultanates of Bir 'Ali and Balhaf and the two tiny sheikhdoms of 'Irqa and Haura. Juridically all these treaty chiefdoms are of the same status, but the premier chief is the Qu'aiti Sultan of Shihr and Mukalla who has the title of Highness and a salute of eleven guns, and after him comes the Kathiri Sultan of Seiyun with a salute of nine guns. Until the nineteenth century the Kathiris had been for some centuries the ruling dynasty of the greater part of the country depending for their power on foreign mercenaries, most of whom were Yafa'i tribesmen from the mountains of the lower Yemen. In course of time these mercenaries became more powerful than the Kathiris and from them arose two dynasties, first of the Kasadis and then, conquering them and much of the Kathiri country, the Qu'aitis.

The Hadhramaut is essentially a desert region, with a negligible and uncertain rainfall, in which the inhabitants have from a respectable antiquity evolved elaborate systems of irrigation to make the most of their limited water and infertile soil, on which they have probably never been able to support themselves. But as the Hadhramis are commercially an enterprising people they have for as far back as we have any certain knowledge of them, a matter of rather more than 2,000 years, lived on trade. The ancient Hadhramaut lived on the incense trade: when that went by sea they learnt to emigrate and for centuries now the Hadhramis have gone abroad to earn money in the countries bordering the Red Sea, in East Africa, in India and most of all in the East Indies. One in every three or four Hadhramis is always abroad, generally temporarily for it is always their ambition to return home, and the largest colonies and the largest fortunes are found in the Netherlands East Indies, particularly Java. The community in Singapore is small but wealthy.

Until 1937 the principal feature of their life in their own country was chronic internal strife, for despite their ability to amass money abroad from house property, by trade—mainly in piece goods—by money-lending,

LAND AND PEOPLES OF THE HADHRAMAUT, ADEN PROTECTORATE

Ruthven W. Pike

ALTHOUGH Southern Arabia borders on the much-traveled route to India and ocean liners daily touch its shore at the port of Aden, it has been little reconnoitered, far less than the northern part of the peninsula. A chronological account of exploration in the part of Southern Arabia known as the Hadhramaut, by Mr. W. H. Ingrams (now Chief Secretary in Aden), appeared in the *Geographical Review* for October, 1938. It is entirely due to the tactful and untiring efforts of Mr. and Mrs. Ingrams, who, with the coöperation of Seiyid Abu Bekr al Kaf, member of the wealthiest family in the Hadhramaut, have succeeded in establishing peace and understanding among the many tribes of the region, that it is now possible for a European to journey unmolested within prescribed regions.

The boundaries of the Aden Protectorate, of which the Hadhramaut is a part, extend into heretofore unexplored territory and have not been surveyed in the manner customary in settled areas. The limits are well understood, however. They are formed by the Gulf of Aden on the south, the district of Dhufar on the east, the southern margin of the great interior sandy desert of Rub' al Khali on the north, and a line running N 45° E from Perim Island to the Rub' al Khali on the west.

The population is densest near Aden and its mountainous hinterland. There are, however, a great many people to the east of Aden, who live along the coast and in the interior of the Hadhramaut; Mr. Ingrams estimates their number at 260,000. There are also many towns and villages between the mouth of the Wadi Maseila and the Dhufar Coast, with a population thought to be about 25,000. Mukalla, with 16,000 inhabitants, is the chief port of the Hadhramaut and seat of the British Colonial Administration for the surrounding area.

Climate

The climate at sea level between October and April is healthful and agreeable to one accustomed to living in temperate regions. On the interior plateau, or Jol, at altitudes of 3000 to 4000 feet, and in the Wadi Hadhramaut, at 2000 feet, the nights are cool, with minimum temperatures reaching 50° F., and are apt to be windy. At such times ordinary summer clothing and light bedding do not afford enough protection.

From April on, the average and maximum daily temperatures

B: Pike N-4 (no date) 1940 MM2 Hadhramaut MM2

mount steadily, until travel at midday becomes unpleasant and is not even practiced by the thoroughly accustomed Bedouins. At the peak of summer, travel is reduced to a minimum, and that undertaken only at night, probably more out of consideration for the Bedouin's valued beast of burden than for himself. A period of extreme heat lasting about forty days, known as the "arbainia" (*arba*, Arabic for "four"), usually begins about May 4, and there is another period of eight days later in the year.

The atmosphere, especially on the Jol, is exceptionally clear, save when an occasional dust storm darkens the sky. The dust storms affect large areas, for the wind-borne material is fine and easily distributed; but they do not extend to high altitudes. Fliers over the Jol report that at a few thousand feet above ground level the air normally remains clear. When moisture-laden winds are blowing landward from the Gulf of Aden, cloud banks cover the narrow coastal zone between the sea and the precipitous margin of the interior plateau.

Few or no instrumental data are at hand regarding rainfall in this part of Arabia. Heald, who reported on the agriculture of the Hadhramaut in 1921, says:

> The rain-fall along the coast is practically nil, some years they have one or two inches, but useless for agriculture, the floods being from the interior rain a long distance from Mukalla; when we were in the district from December to April, we had two or three showers, but every time too small for the rain gauge to measure.[1]

The Plateau and Its Borders

In the Hadhramaut the narrow, sandy coast is bordered by a belt of mountains 30 miles wide. At the western edge of the Hadhramaut, about 100 miles east of Aden, rugged coast ranges rise to 7000 or 8000 feet. They are succeeded on the east by slightly lower table-topped and scarp-bounded mountains, whose height gradually decreases to about 2000 feet at Ras Fartak.

Between these mountains and the interior desert of Rub' al Khali, the southern border of which runs parallel to the coast at a distance of 200 miles, stretches a highly dissected and terraced tableland, sloping very gently to the north and east. Dissection is greatest in the Hadhramaut, Maseila, and Hafif drainage basins; the fringe of the interior desert shows considerably less erosion. The eastward slope of the plateau has an average gradient of 1 in 500 (in the 610 kilometers between Hafif and Shabwa the surface rises from sea level to 1200 meters). The over-all northward component of slope is less, perhaps 1 in 1000; it cannot be determined because the altitude of the Rub' al Khali is not known. The gradient is not uniform,

[1] Quoted by W. H. Ingrams: A Report on the Social, Economic and Political Condition of the Hadhramaut, *Colonial No. 123*, London, 1936, p. 8.

133 presents the appearance of an undissected plain stretching to the horizon, broken here and there by flat-topped, isolated hills and extensive rock terraces. Only by a campaign of "trial and error" can one find where the drainage divides are and the limitations the drainage imposes on freedom of movement in this treeless and apparently obstacle-free terrain. Even the smallest wadi constitutes a formidable obstacle; for should descent be possible, the chances of finding a route to scramble up the opposite wall are small. With
487 almost limitless time at their disposal, the Bedouins have obtained a comprehensive picture of the stream system and have adjusted their caravan routes accordingly, utilizing the relatively few suitable passes from wadi level to plateau level. From a distance these century-old trails appear as inconspicuous paths; yet along the passes and narrow parts of present caravan routes, some of which are thought to be identical with the incense roads of antiquity, one may observe that once-jagged rocks have been rounded and polished by the passage of countless unshod men and soft-footed camels during several thousand years.

Hadhramaut–Maseila Drainage System

133 The drainage of the Hadhramaut is divisible into four systems: (1) Wadi Hadhramaut–Wadi Maseila; (2) streams flowing north to the interior basin of the Rub' al Khali desert; (3) eastward-flowing streams entering the sea on the Hafif coast; (4) small and short streams tributary to the Gulf of Aden.

To the west of Tarim the main stream is known as the Wadi Hadhramaut, to the east as the Wadi Maseila. It has been explored on foot by Mr. and Mrs. Ingrams for 360 miles from its mouth to the longitude of Shabwa, where the valley walls, 1000 feet high, diverge and flare off to the north and south, leaving a sandy, featureless plain, studded with low dunes and occasional salt-incrusted flats, stretching westward toward the mountains of Yemen, 200 miles away.

For much of the distance below Tarim the water flows above ground; but upstream the bed is dry and water must be obtained
[312 from wells 30 to 45 feet deep. The supply seems adequate for present-
132] day domestic and irrigation requirements, and acute water shortages are uncommon. During the summer there is some rain in the interior, especially in the mountains of Yemen, and water then flows down the valley all the way to the coast, at times becoming a flood. It is suggested that the present direction of flow of the Wadi Hadhramaut may have been achieved in recent time through piracy by a rapidly eroding stream flowing south to the coast, which has succeeded in diverting drainage that formerly flowed westward into the Rub' al Khali via the broad western part of the valley.

8 Pike N-4 (no date) 1940 MM2 Hadhramaut MM2

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mineral content of the water seem to affect agriculture adversely. A striking example is seen about five miles north of Shihr where a series of springs depositing sulphur and gypsum have built an impressive mound, on which the village of Tabala stands. Their abundant and continued flow enables extensive irrigation by hand-dug canals and aqueducts and affords a means of livelihood for several hundred

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FIG. 10—A caravan settling down for the night on the cold and stony Jol in the lengthening shadows of the setting sun. A caravan stops wherever night may overtake it and with little or no cover the Bedouins find a place to rest among the stones and shiver themselves to sleep. A coating of indigo stain with which the Bedouins not uncommonly paint themselves is said to be some defense against the night air.

people. The temperature of these springs on emergence is not far below boiling point, and they are reported to be the hottest on the coast.

At the small village of Harshiat, 3½ miles north of Mukalla, a few tepid sulphurous springs likewise are valuable for their yield. At the village of Gheil ba Wazir, on the inland road between Mukalla and Shihr, is an extensive gypsum flat and also a group of gypsum-depositing springs. Here a tobacco-raising community has sprung up. A part of the arable land is devoted to the growing of dates and millet and the remainder to tobacco, for which, owing to a quality unsurpassed in Southern Arabia, demand exceeds supply.

The small community of Husn Baquidran depends on a limited but constant supply of nongypsiferous sulphur water in the mountains of the Wadi Hajr, 30 miles from the coast. Irrigation is practiced on a small scale. The sites of Sidara and Mahamda, on the Wadi Hajr above Husn Baquidran, were determined by the presence of several groups of sulphur springs that are used for irrigation and consumption.

VEGETATION

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Today only the seaward fringe of the Dhufar Coast region, which during the pre-Islamic empires of the Minaeans, Sabaeans, and

Himyarites was an important export center for incense and myrrh, has enough rainfall to support a thin growth of vegetation, largely incense trees. From this area and the surrounding country, at one time more abundantly watered, the priceless gum was most extensively collected in the past. It is still gathered today in small amounts, according to demand. The gum, which adheres to the bark, is harvested from varieties of the Burseraceae family, *Boswellia Carterii* and *B. Bhua-Dajiana*, divided by the Arabs into four grades.[4] Its value, which ranges from £80 to £10 a ton, depends on such qualities as color (red, green, and brown), size of the gum particles, and degree of adulteration. Just as the rubber gatherers of the Amazon debased latex with pebbles and gravel, so did the Arabs in the heyday of the incense trade, and to some extent even now, admix varying amounts of fine sand with the gum to increase its weight. Between March and August the trees are tapped by knife incision and a milky juice is extracted, which dries in three to five days.

FIG. 30. Caravan loading. The three men at the right are arguing about the disposition of loads.

Besides incense trees, a thin and scattered growth of bunch grass, camel's-thorn, and a cedarlike evergreen abundant in some dry wadies is found in the Hadhramaut. Date-palm groves, which cover many square miles, are mainly dependent on irrigation.

Sources of Water Supply

In addition to artesian water and the water obtained from wells, other sources of supply are available. One of these is the *siquaya*, a small, rectangular, concrete tank with a capacity of 20 or 25 gallons erected along caravan routes near towns and maintained by them as a public service. Another is the well or cistern excavated at the base

[4] Freya Stark: The Southern Gates of Arabia. [New York], 1936. pp. 10–11.

16: Gardner A·4 (1937-38) 1939 MM2 Hadhramaut MM2

the seaward end of the 16 m. terrace already mentioned. It slopes from about RL 15 beneath the higher plain to RL 12. Here it ends in a scarp about 2 m. high, and below it a consolidated yellow sand forms the wadi floor. The channe here turns and breaks through a ridge to the sea. This ridge is composed of cellular sandstone similar in appearance to that seen near Mukalla and, n some places, of gravels. From its level it would seem to be the last remnantof the big erosional plain on the east side of the wadi.

We have then inthis area three well-defined levels and a minor one. These in order of age are: high-level gravel, RL 52 m., possibly Tertiary or early Pleistocene; remnant of erosional level, about RL 32 m., with palaeolithic chert implements on surface; extensive and important erosional plain, about RL 28 m., no sign of marine deposits passing downstream; terrace at 7 m.–5 m. above wadi floor at RL 16 m.; and a terrace at 3 m. above wadi floor.

The road to Shihr continues along the coastal plain, crossing marine beds in many places, and runs over an extensive development of gravel just before reaching the town.

The coastal plainis here some 10–12 km. broad, and is backed by the great cliffs and outliers of the South Arabian plateau, called the *jol*. It is some 1000 m. high, but slopes gradually northwards up to 3000 m., becoming ever more barren as it recedes from the influence of the monsoon rains. The newly made road toTarim follows a switch-back course over it, now crossing stony plateaux, then descending into broad flat-bottomed wadis often sand-covered and with lines of trees and scrub marking the watercourses. In these wadis a loess-like deposit that was later to become such a familiar and prehistorically important feature in the Wadi Hadhramaut and its tributaries, was first seen. Here as there, it seems to have filled the valleys through which later erosion has carved a way. Near the village of Reida, in the Ma'ara country about 60 km. from the southern edge of the plateau, rounded consolidated gravel andconglomerate were seen near a water-hole.

The watershed between the north and south-running valleys lies much nearer the southern than the northern edge of the plateau; this is possibly due to subsidence ofthe coastal area, and as a consequence many of the wadis draining into the Wadi Hadhramaut are very long. Nearing the edge of this great wadi the character of the drainage changes; instead of broad flat-bottomed valleys, there are narrow ravines deeply entrenched in the limestone (Plate 4). On the sony ground between them numerous deeply patinated palaeoliths, both cores and flakes, were found, similar in type to others whose occurrence *in situ* in gravel terraces of the valley floor system will be described later. Their position here, on tongues of plateau furrowed by deep ravines, recalled the occurrence of typologically similar implements on similar tongues of plateau licking the cliff edge of the Nile valley.

We first saw the Wadi Hadhramaut from the top of the pass leading sharply down to Tarim. It is a great flat-floored trench some 3 km. broad and 300 m. deep, bounded by high cliffs of characteristic outline, which repeats itself with monotonous regularity both along the main wadi and in the tributary valleys. This outline is the expression of the geological features, which are here very simple (Plates 2, 3). The cliffs consist of a series of almost horizontal beds; the upper 200 m. are of limestone, Eocene over Cretaceous.

21: Thomas T-5 (no date) 982 MM2 Hadhramaut MM2

ocean escarpment, but in the Hadhramaut they intrude for over 120 miles to the northwards. Beyond them and between them and the southern edge of the sands is a wedge-shaped plain narrowing westwards and falling from south to north and from west to east. The edge of the sands at Mugshin is about 490 ft., at Shisur about 935 ft., at Shuait 950 ft., and to the west not improbably rising to 2,000 ft. or more in the neighbourhood of the Najran. This plain is crossed by dry wadi beds, or what Burton calls "fiumura." They take their rise in ravines deeply eroded in the limestone of the mountains and they become more shallow as they run northwards, until, as they approach the sands, they are almost indistinguishable from the steppe in which they are merely shallow depressions marked here and there by scrub. These wadis are the arteries of approach for Badus journeying from the mountains northwards. They are evidence of a very different climate from what now prevails, the deep gorges are doubtless the result of torrential rain action. To-day the country is extremely arid, and rainfall is slight or negligible.

Arabia is said never to have had an ice age, so that when the territories of the higher latitudes of the Northern Hemisphere lay beneath an ice cap, Arabia must have enjoyed a pluvial period, and it is from this time that these great gorges running northwards on the desert side of the South Arabia escarpment possibly date. I picked up many fossils on the edge of the sands, which must have been washed down in bygone ages. These were of limestone formation and have all been identified as belonging to the Middle Eocene period. The tradition of ancient trade routes across what is now almost a prohibitive barrier of sands, should not therefore be dismissed as unreasonable: it may connote that a very early civilization existed in this region. Indeed caravan tracks of great antiquity were pointed out to me in lat. 18° 30′, long. 52° on the very edge of the sands and leading on a bearing of 325° into what is now a drought-stricken waste of sands. The Badus called this "the road to Ubar," a town which they say lies buried, according to their tradition, beneath the sands that are ever encroaching southwards. Whether the words "Ubar" and "Ophir" have any sort of connection it is impossible to say, but the alleged site of this buried city is on a direct line from the frankincense country of Dhufar to the most probable site of Gerrha on the Persian Gulf, and to Petra in Nabathæa, the great marts of the classical geographers.

Other archæological remains are the old ruined townships of the plain of Dhufar and the trilith monuments I discovered in the frankincense country just over the Divide.[1] The former would appear to preserve a link with ancient Abyssinia, for the characteristic architectural feature is a monolithic column which, according to Bent, is common to that area, but is nowhere found being made to-day in Arabia. As regards the significance of the trilith monument, accurate memory of it has faded from the tribal mind. This brings us to the inhabitants themselves.

The nomadic tribes living in the Southern Steppe are Bait Kathir, elements of the Mahra, Manahil, Awamir, Sa'ar and Mashai (Bal'Ubaid). In the mountains in northern Hadhramaut and the hinterland of Aden are two other interesting types, Hamumi and Yaf'i. With the

[1] For a detailed account see "Among Some Unknown Tribes of South Arabia," *Journ. Roy. Anthrop. Inst.*, vol. xiv, 1921, pp. 107 *seq.*

24:Meulen and Wissmann T-3 (1931)1932 MM2 Hadhramaut MM2

finest house in all Wādī Dō'an and that we must come and see it without fail. They were born in Addis Abeba of Abyssinian mothers; there, by trading in skins, their father had made the money with which he had built his house. The boys refused to be sent away until they had extracted a promise that we would come on the morrow.

3. THE DAYS SPENT IN WĀDĪ DŌ'AN.

The nights in Wādī Dō'an are said to be cool; 34.2° C. is certainly not cold, but the atmosphere is dry and we can all sleep on the roof though mosquito-nets are necessary. The bathrooms and lavatories in the houses make good breeding-places for insects. Flies also, during the day-time, are more numerous than we could wish.

On the following morning, May 16th, Bā Ṣurra sends us a real Arabian breakfast: a heavy bunch of fine dates in a basket, a tin entirely filled with honey in the comb, the famous honey of this country and one of its few articles of export, further, pine-apple in water made in a Chinese fruit-preserving factory at Singapore and, in a flat basket, a pile of Ḥaḍramī bread, thick pancakes of flour, just baked and still warm from the fire. This bread is saltless and rather heavy, but has a clean taste, but when cold it is as tough as leather. It tastes better and is more digestible than the bread which the Bedouins make, and bake in hot ashes. This latter is of the size and shape of a man's hand (thus about an inch thick) and is generally burnt outside and underbaked inside. It looks red or yellow according to the kind of *dhura* or *dukhn* of which it is made. After breakfast we go together to the *maṣnaʿa* to negotiate arrangements for our further journey and to collect, in the course of our talk, information about this region. Our Sēbānī people will remain here with their camels and donkeys, for we must take with us animals accustomed to go through the wide, level wādīs.

24:Meulen and Wissmann T-3 (1931)1932 MM2 Hadhramaut MM2

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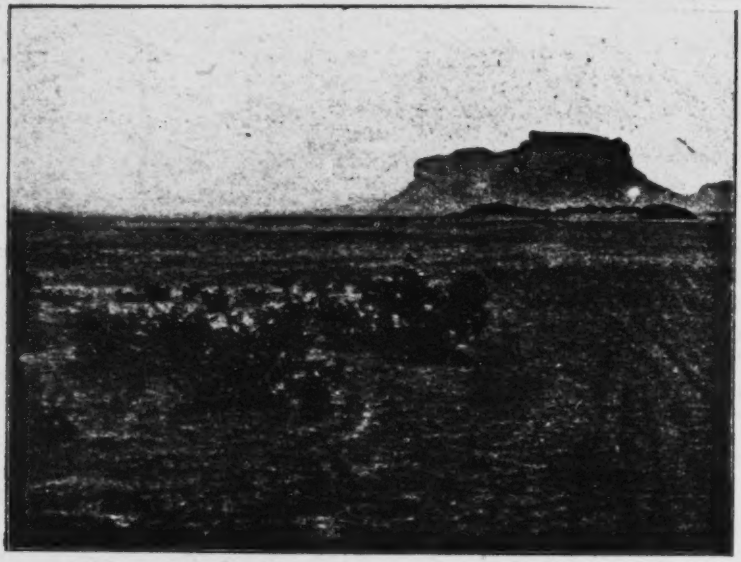

A sand-storm blowing up in Wādī 'l-Kasr.

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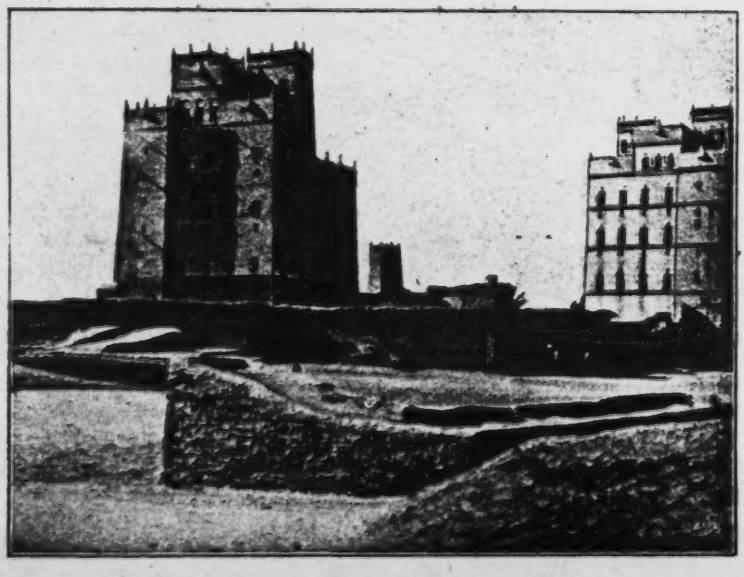

A war centre at the portal of Ḥaḍramaut Proper:
Diyār Āl Buqrī.

P 104 (A)

See pages 101 and 109.

24:Meulen and Wissmann T-3 (1931)1932 MM2 Hadhramaut MM2

seen at that time than there is now. The people inform us that the late Sultan had a stone, bearing an inscription, removed from the *masdjid* into which it was built and that he presented it to one of the *Efrendjīs*.[1] There are still a few mounds of ruins to be seen in ᶜUqrān and, further, several of the simple mud houses of the place are built on foundations dating from pre-Islamic times. Walls and evenly made stairs leading to the inhabited storeys of the houses have been put together of stones, excellently hewn and bound with a kind of mortar unknown at the present time.

After having had our meal with the Sultan at el-Qaṭn we go on in two cars to Hēnin. Vegetation ceases near el-Furṭ, then we drive for a short time over the layer of loess, but after that the drift-sand gets the upper hand. Sand-storms always arise in the afternoon in this region; they are caused by the sand becoming greatly heated and by the rise of columns of hot air. Before long we were absorbed into a burning shroud of sand and were fighting our lonely way onwards. Occasionally a bit of the rock-wall can be seen through the mist, and that has to suffice for the drivers to take their bearings by. After some groping and going astray we really do arrive at Hēnin. One of the cars has motor trouble and, after vain attempts to repair it, has to be left behind. Our friend Bin Martaᶜ is unfortunately away and his car with him. Wādī Ḥaḍramaut begins here and is six miles wide, but still we venture the crossing in one overburdened car from Hēnin on the north bank to el-Qaᶜūẓa on the south side, at the point where Wādī Rakhīya, Wādī 'l-Kasr and Wādī ᶜAmd unite and form the great Ḥaḍramaut Valley. Then we drive on over the clay layer and then again over drift-sand, going as fast as possible so as to avoid stalling. The high promontory of rock behind el-Qaᶜūẓa is a good landmark.

Shortly before sunset we emerge out of the fog of sand just in front of the closed gates of the castle, to the speechless

[1] This *Efrendjī* was Mr. Bent, who reproduces the stone opposite p. 145 of his book.

24:Meulen and Wissmann T-3 (1931)1932 MM2 Hadhramaut MM2

493 in the saddle, for the camel sees obstacles on the ground, which escape my searching eye, so that unexpected swerves are the result. It is a fantastic and most exhausting ride, which only comes to an end when, close to the little town of ʿAmd, we reach the house in which we are to be lodged. The rest of the caravan arrives after us in dribblets, and before long we are sitting together on the spacious roof of our guest-house, onto which crowds of inquisitive folk are flocking.

511 167 191 186 Nowhere, so far, had so much Malay been spoken and nowhere was conversation so frank and open. ʿAmd appears to be a town on the decline and very poor and to suffer much from protracted warfare. This condition of things leads the young men to seek their fortunes out of the country, Java attracting the bulk of them. The consequence is that a great many wives and children remain behind in poverty. The number of boys who are sent from Java to be brought up in ʿAmd is relatively large. They can be distinguished at once from among their dirty little comrades by their better dress and greater cleanliness. They form a part of our visitors that night and begin with great boldness to talk in Malay, to show off their knowledge. These youngsters look upon their sojourn in ʿAmd as a real period of exile and pine for Java.

000 The discussions over plans for our further journey were disappointing. It was considered to be out of the question for us to go to Nişāb, but they could certainly bring us to the coast towns of Bal-Ḥāf or Bīr ʿAlī. Everyone deserted us at this point, even our own Sayyid ʿAlī el-ʿAṭṭās, but we held on to Nişāb. Before we retired to a roof-terrace higher up, we had Sayyid Abū Bakr el-Kāf's letter of introduction and those from the Sultans of Sēwūn and Shibām read aloud, which made a noticeable impression. I added thereto that we were determined to go to Nişāb and that we wished to leave on the morrow. So we bade farewell to this company, which was to carry on its consultations until deep into the night.

0 /32 It is appreciably cooler at ʿAmd than it is further in Ḥaḍramaut, Terīm being the hottest place. The altitude of

24:Meulen and Wissmann T-3 (1931)1932 MM2 Hadhramaut MM2

ʿAmd is higher and it lies also nearer to the highlands from whence a cool wind blows when evening falls.

We were early awakened by the sun, and discussions began soon afterwards. It looked as if the journey by way of Nişāb was regarded more favourably, but they tried to postpone the matter. The frontier of the Djaʿdī sphere of influence runs close to ʿAmd and the war zone begins immediately beyond it. Three parties are at war with each other there and they have built fortified watch-towers along the frontier. We were told that an unarmed sayyid could conduct us through the dangerous territory, and this we were glad to believe and we were ready not only to trust such a highly respected personage with our lives, but also to reward him handsomely for his services. A sayyid is called for who is able and willing to undertake the mission. This impoverished descendant of the Prophet is a haughty and self-confident man, for whom it is obviously hard to accept service with two *Naṣrānīs*, and only their gold tempts him to it. Then, after further deliberation, he comes to the conclusion that he dares not venture and lengthy negotiations are resumed with another sayyid, who in turn backs out. Meanwhile, arrangements are being pushed through for the camels promised for to-day by Shēkh ʿAwaḍ. Everyone seeks a loop-hole of escape and tries to palm us off with promises. Our language becomes more and more threatening and we feign to be really indignant, though in point of fact we are only afraid that we shall be checked here. We have to force matters, for if we allow of delays all hope of getting to Nişāb will be lost.

Both Shēkh ʿAwaḍ and his satellite, Sālim bin Sallūm, have sons seeking their fortunes in Java, whom they would like to visit. They have asked my help in this and I have noted down the sons' addresses. They would certainly be glad to help us, but dare not, so we remain the centre of very agitated discussions which suddenly flare up into abuse and last the whole day long. We make a call on the sayyids, but with little result; we avoid kissing their hands as we have always

3:Royal Institute of International Affairs U-4 (no date)1954 M1 Middle East
Aden MM1
Hadramaut MM2

Continuing friction was sharpened when British geologists prospected unsuccessfully for oil in part of the disputed territory. In 1949 the RAF bombed a fort which Yemeni troops were building on territory claimed by the Sharif of Baihan, a ruler within the Western Aden Protectorate. A new Anglo-Yemeni Treaty of 1951[1] proposed to settle the frontier dispute by means of a joint commission. In April 1952, however, the Sultan Fadl Abdul Karim of Lahej (the most important state of the Western Aden Protectorate) summarily executed two of his cousins and, when 'invited' by the Governor of Aden to go there for medical treatment pending an independent judicial inquiry, fled to the Yemen. The Yemen Government immediately protested against the temporary occupation by Aden Protectorate Levies of Lahej town (which lies thirty miles from the Yemen frontier), on the grounds that the Yemen 'had vital interests in the stability of that area'.[2] A council of the tribal leaders of Lahej unanimously declared Fadl Abdul-Karim deposed in favour of his younger brother, the Aden Protectorate Government having imposed as a condition of his election that he should accept a resident adviser as a precaution against the irregularities which had occurred under Fadl Abdul-Karim.[3] The latter meanwhile continued to protest to the Arab League against his deposition, claiming that Lahej had always enjoyed autonomy and connecting the Aden Government's action with AIOC's proposal to build its refinery.[4]

Kamaran Island, lying off the Yemen coast 200 miles north of Perim, was an Ottoman quarantine station for pilgrims travelling to Mecca from the East. British forces occupied it in 1915; and when the Turkish Republic renounced its sovereignty over the island in the Treaty of Lausanne (1923), its status became indeterminate; but it continued to be administered by the Governor of Aden and to be available for use as a quarantine station.

THE PROTECTORATE

The area of the Western Protectorate is approximately 42,000 square miles and of the Eastern Protectorate 70,000, Aden Colony being a small enclave (75 square miles) in the territory of the latter. Arable land is estimated at only one-third per cent of the whole, and established pastures and meadows are unknown, the bulk of the area being desert or steppe, which pro-

[1] Cmd. 8590 (1952).
[2] *The Times*, 23 April 1952.
[3] *Mideast Mirror*, 11 October 1952, p. 25.
[4] *Bourse Egyptienne*, 10 and 25 June 1952; cf. *The Times*, 27 October 1951, 4 April 1952.

3:Royal Institute of International Affairs U-4 (no date)1954 M1 Middle East
Hadramout MM2

vides seasonal grazing for camels, sheep, and goats.[1] Nevertheless, the Western Protectorate, where rainfall averages from about 2 inches a year on the coast to 7 inches in the uplands and 12 inches in the highlands, is self-supporting in food in normal seasons; the main crop is millet, with wheat, barley, and mustard as summer crops, and other products of importance are coffee and the drug *qat* (the chewing of which is a pernicious habit in south-west Arabia); field-terracing is general in the highlands, and elsewhere the land is mainly irrigated from wells. In the Eastern Protectorate the rainfall is lower and food has to be imported, particularly for the coastal areas and the pastoral tribes; millet is again the main cereal crop, supplemented by lucerne, tobacco, honey, and fish products; until recently most of the honey has been exported to Java, this being connected with the large-scale eastward emigration from the Hadramaut in the last 150 years. The date-palm provides the chief food product of the Hadramaut.

The estimated population of Aden Protectorate at mid-1952 was 800,000. The organization is largely tribal, consisting of some thirty sultanates, shaikhdoms, and other tribal units of varying size. During the past hundred years their rulers have one by one entered into treaty relations with the British Government and are under its protection; but British administration (through an Agent in each Protectorate, responsible to the Governor of Aden) is essentially indirect, and has grown piecemeal for the prevention of intertribal conflict in the interests of travellers and commerce. Some of the chiefs have voluntarily accepted advisory treaties binding them to administer their territories in accordance with the Governor's advice. But not all of them have complete control over their nominal subjects, and the authority of those who have not accepted advisory treaties with the Governor of Aden may be highly capricious; reference has already been made to the conduct of the important Sultan of Lahej which led to a British intervention in April 1952.[2] The most important state of the Eastern Protectorate is the Quaiti Sultanate of Shihr and Mukalla which, like the Sultanate of Lahej, carries the title of 'His Highness' and has its own small regular army; the Quaiti

[1] See 'Banishing Famine from Aden', *Commonwealth Survey*, 14 May 1949, pp. 37–8. For the distinction between steppe and desert vegetation, see Fisher, *The Middle East*, pp. 72–3 and map, p. 70.

[2] See above, p. 103; and see generally Doreen Ingrams, *A Survey of Social and Economic Conditions in the Aden Protectorate* (Eritrea, Government Printer to the British Administration, 1949), pp. 20–32. A punitive expedition was sent to the Shairi tribe in the Western Protectorate in December 1950 after an attempt to assassinate the British Agent.

5:Gt. Brit., Colonial Office G-3 (1947) 1949 MM1 Aden
Hadhramaut MM2

315 A party from Petroleum Concessions Ltd. arrived in November and, after visiting Hadhramaut, went east along the coast to prospect the Mahra area.

Chapter 7: Agriculture, Fisheries and Forestry

AGRICULTURE

General

132 There was rain in the west of the Hadhramaut and in the Eastern coastal 312 area in February, and in June and August good rains in the Hadhramaut formed a new lake above the recently finished Nuqra dam. The spring 243 wheat and barley crops were satisfactory. Efforts to persuade the farmers to grow barley rather than wheat continued and towards the end of the year some effect was noticed, partly owing to the discovery of a way of cooking the barley so as to make it acceptable as food; experiments in machine grinding were also started.

Staff

647 The staff of the Department of Agriculture consists of a Director, two Agricultural Officers, an Agricultural Assistant, an Engineer Assistant and six Agricultural Instructors.

Land Utilisation

312 Lack of rainfall imposes a severe limitation on crop production in the Protectorate. Highly developed conservation measures, run-off 311 control, flood irrigation and artificial irrigation are employed to secure arable land production. The percentage of arable land to the desert and range is estimated at 0·33 per cent. Established pastures and meadows are unknown. Dry forest scrub is found on the Island of Socotra and in the far Eastern Mahra Coast.

Crop Production

241

Western Aden Protectorate

	Acres	*Tons*
Millet—sorghum	60,000	12,000
Bulrush millet and other small millets	10,000	1,500
Wheat	1,500	750
Barley	4,500	3,000
Sesame	10,000	1,000

Eastern Aden Protectorate

Millet—sorghum	20,000	4,000
Bulrush millet and other small millets	3,000	500
Wheat	3,500	2,500
Date palms	10,000	5,500

5:Gt. Brit., Colonial Office G-3 (1947) 1949 MM1 Aden Hadhramaut MM21

509 no regular steamer service, but the R.A.F. continued the carrying of mail and Government passengers, while in May Ethiopian Air Lines, an American company, received permission to run a fortnightly service, Aden-Riyan and return, which they continued to do throughout the year.

Chapter 11 : Geography and Climate

SITUATION AND AREA

131 The Aden Protectorate which can be more conveniently described administratively and geographically by dividing it into two areas, the Western and Eastern, has a total superficial area of about 112,000 square miles. It is bounded on the east by the western boundary of the Sultanate of Muscat and Oman, on the north and west by the Ruba' al Khali (or Empty Quarter) and the kingdom of the Yemen (whose southern boundary was temporarily stabilised by Article III of the Treaty of Sana'a of 11th February, 1934, by which His Majesty's Government and the Government of the Yemen agreed to maintain the *status quo* as on the date of the signature of the treaty), and on the south by the Gulf of Aden and the Indian Ocean. The Aden Protectorate seaboard starts at Husn Murad (opposite Perim) on the west, and runs for 740 miles eastwards to Ras Dhurbat Ali, where it meets the frontier of the Sultanate of Muscat and Oman.

CLIMATE

132 The maritime plains are damp and hot in the summer, and are subject to sandstorms and high winds. In the winter (October to the end of 133 March) it is cool and sometimes cold at night and much less damp.

In the mountains, which vary in height between 1,500 and 8,000 feet, it is drier and cooler during the day and night; at above 4,500 feet it can be very cold.

In the Wadi Hadhramaut and the intervening tableland or "Jol", extremes of both heat and cold are encountered. The heat, in contrast to that of the coast, is dry, but more intense. The rainfall is small.

There is little rainfall in the littoral and maritime hills; here cultivation 241 is chiefly dependent on irrigation from water channels and courses. In the highlands well irrigation is common and there is heavier rainfall, which is led down ravines and defiles into terraced fields.

GENERAL DESCRIPTION

133 The Western Aden Protectorate is divided into: the littoral belt which varies between four and 40 miles in depth; the maritime ranges about 1,000–2,000 feet above sea-level; the intramontane plains over 3,000 feet high; and the highland plateau which ranges from 5,000 to

6:Gt. Brit., Colonial Office G-3 (1948) 1950 MM1 Aden
Hadhramaut MM2

(B) EXPORTS

No.	Commodity	No. of packages	Quantity	Value Rs.
1.	Tobacco, native	13,236 bdls.	16,858 cwt.	8,93,650
2.	Honey in comb	—	5,200 lb.	5,600
3.	„ cleaned	—	1,020 „	2,550
4.	Dates, country	—	900 „	220
5.	Lime	3,879 bags	4,000 cwt.	15,500
6.	Sheep and Goats' skins, tanned	—	10 scores	1,000
7.	Dried lemons	229 bdls.	581 cwt.	33,000
8.	Fish oil	17,049 tins	68,195 gln.	1,27,860
9.	Miscellaneous	—	—	2,93,380
			TOTAL	13,82,760

Chapter 7: Agriculture and Fisheries

AGRICULTURE

In 1948 farming conditions were generally poor in the Aden Protectorate. Conditions of 1947 were reversed in the areas west of the Bana river, which had a poor 1947 season, received fair rainfall and flood conditions, while east of the Bana erratic and poor rainfall over large areas reduced food production to a low level. This was particularly true of the Hadhramaut and other eastern districts where complete drought returned to the country, causing famine conditions to reappear at the end of the year. The shortage of food was accentuated in those areas where the economy of the country is largely dependent on remittances from abroad. Famine appeared particularly in the Wadi Amd and in Rakhya, where food production is not secured by any irrigation from underground supplies, but is dependent entirely on rain and runoff control. These districts are also partly dependent on remittances from Hyderabad and became particularly affected when India invaded Hyderabad, and currency decrees in Hyderabad cut off the flow of remittances. The scarcity of food was further aggravated by the ban on exports of grain from the Yemen.

Staff

The technical staff of the Department of Agriculture consists of a Director, two Agricultural Officers (to be increased to four), an Agricultural Assistant and six Agricultural Instructors.

The Abyan Development Scheme has the part-time services of an Irrigation Adviser.

Rainfall Crop and Livestock Conditions

In the districts west of the Bana river *saif* rains were fair, particularly in the highland areas. East of the Bana river *saif* conditions were poor in many districts, but in Beihan conditions were good and the Wadi ran no less than eleven floods. Most of this water was from the runoff of

6:Gt. Brit., Colonial Office G-3 (1948) 1950 MM1 Aden
Hadhramaut MM2

131 tanate of Muscat and Oman, on the north and west by the Ruba' al Khail (or Empty Quarter) and the kingdom of the Yemen (whose southern boundary was temporarily established by Article III of the Treaty of Sana'a of 11th February, 1934, by which His Majesty's Government and the Government of the Yemen agreed to maintain the status quo as on the date of the signature of the treaty), and on the south by the Gulf of Aden and the Indian Ocean. The Aden Protectorate seaboard starts at Husn Murad (opposite Perim) on the west, and runs for 740 miles eastwards to Ras Dhurbat Ali, where it meets the frontier of the Sultanate of Muscat and Oman.

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The greater part of the Eastern Aden Protectorate consists of desert and barren mountains intersected by wadis, some of which are fertile and 34 cultivated. There are a number of comparatively large towns, notably Mukalla, the capital of the Qu'aiti State and principal seaport, and Seiyun, the capital of the Kathiri State.

Chapter 12: Administration

131 The Eastern Aden Protectorate comprises the Hadhramaut (consisting 648 of the Qu'aiti State of Shihr and Mukalla, and the Kathiri State of Seiyun),

7: Gt. Brit., Colonial Office G-3 (1949-50) 1951 MM1 Aden
Hadhramaut MM2

PART IV

Chapter 1: General Review

WESTERN ADEN PROTECTORATE

THE poor rainfall of 1948 was repeated in 1949 ; but the rains of 1950 were in almost all areas exceptionally good and the economic situation is generally better than it has been for a long period. The new forms of administration in Shaib and Beihan progressed slowly but satisfactorily and up to the end of the period the political situation was generally improved, especially in Lower Yafa'i, where more friendly relations were restored between Government and the Sultan. At the very end of the period, on Christmas Eve, the attempted assassination of the British Agent in Shairi country in the Amiri State made a punitive expedition necessary ; but order was being restored by the end of 1950.

In August, 1949, Yemeni troops began to build a fort on Protectorate soil near Najd Marqad in Beihan State. It was eventually found necessary to destroy this fort by air action. This serious incident resulted in an Anglo-Yemeni conference in London in the autumn of 1950 for the purpose of discussing a means of finally clearing away points of misunderstanding between the two Governments.

A number of clashes made it necessary to re-enter the northern part of the lower Aulaqi State. Order was restored by the end of 1950 with a show of force but no actual fighting.

It is hoped that the erection of a fort, now completed, on the main road will put a final stop to trade route incidents in Qutebi country.

A large number of Jews passed through the Protectorate on their way to Aden to be flown to Israel. This operation passed off without a single incident in which a Jew suffered any physical harm.

The development of the Abyan scheme greatly raised the revenues of the Fadhli and Lower Yafa'i states and social services are improving as a result.

EASTERN ADEN PROTECTORATE

Political

The settlement of the Qu'aiti-Kathiri boundary dispute and the general prevalence of peace in tribal areas and throughout the country allowed efforts to be concentrated on development of agriculture and improvement of the administrative machinery.

More responsibility was given to Naibs (local Arab District Com-

7: Gt. Brit., Colonial Office G-3 (1949-50) 1951 MM1 Aden
Hadhramaut mm2

EXPORTS

439

		Quantity	Value Rs.
Tobacco, native	cwt.	22,341	23,59,700
Honey, in combs	lb.	15,348	61,390
Honey, cleaned	"	2,160	7,560
Dates, local	cwt.	299	7,530
Lime	"	8,643	43,220
Sheep and Goat skins ..	scores	326	1,140
Lemons, dried	cwt.	651	37,070
Fish oil	gal.	2,924	7,310
Miscellaneous			2,48,920
TOTAL VALUE OF EXPORTS ..	Rs.		27,73,840

Chapter 7: Production

AGRICULTURE

241

Principal Products

Western Aden Protectorate

	Acres	Tons
Sorghum Millet	62,000	12,400
Bullrush Millet and other small Millets..	9,500	1,900
Wheat	1,500	750 *a.*
Barley	4,500	3,000 *a.*
Sesame	8,500	850

Eastern Aden Protectorate

Sorghum Millet	20,000	4,000
Bullrush Millet and other small Millets..	2,000	400
Wheat	2,000	1,000 *a.*
Date palms..	10,000	3,500

(*a*)—Crops sown in previous year, harvested in 1949.

Estimate of the Numbers of Principal Classes of Livestock

231

Western Aden Protectorate		*Eastern Aden Protectorate*	
Camels	30,000	Camels	40,000
Cattle	50,000	Cattle	7,000
Goats	400,000	Goats	250,000
Sheep	100,000	Sheep	30,000
Donkeys	3,500	Donkeys	3,000

132

The year 1949 opened with drought conditions in almost all districts, but early Saif rains, followed by good late Saif and good Kharif rains, and an exceptional fall of rain in the early part of the winter combined

7: Gt. Brit., Colonial Office G-3 (1949-50) 1951 MM1 Aden
Hadhramaut mm2

132 to make it one of the most favourable for many years. The rains of November and December were judged to have been the heaviest seen for thirty years.

731 Unfortunately the cultivator was in many areas, particularly the eastern districts, unable to make full use of these favourable conditions. This was the result of the bad season of 1948 which had caused famine in the Wadis 'Amd and Rakhya of the Hadhramaut, and continued to cause famine for the first four months of 1949. Famine relief and rehabilitation measures were largely responsible for getting farmers in these western Hadhramaut districts back to work, and by the end of the year there was little indication that a famine had existed in the early months of the year. In the Hadramaut important famine relief and famine prevention measures were adopted ; of outstanding importance was the introduction of a pump scheme financed by the States, and by the end of the year considerable progress had been made with this scheme. Conditions were severe in the 'Aulaqi districts of the Western Protectorate, but other districts, notably Abyan, had surplus grain stocks, and the districts which were short were able to draw on these supplies and move them, mainly by camel transport, to where needed.

653 The year 1949 saw great expansion in the Abyan scheme ; offices
248 and staff buildings were built, supplies were accumulated, and important irrigation work was extended, particularly in the region of the Wadi Hassan. The year saw the emergence of Abyan as a successful producer of long staple cotton, and the harvest from some 82 acres (which averaged 1,750 lb. of seed cotton to the acre) was ginned on a roller gin in Abyan, pressed on a hand press in Aden, and exported to Liverpool for sale to the Raw Cotton Commission. Planting for the 1949–50 crop was extended to over 1,000 acres.

Rainfall, Crop and Livestock Conditions

132 *Saif Rains Season.* An abundant Saif rain was received in
731 almost all districts of the Protectorate in 1949. In parts of the Eastern Protectorate the rains came late, but were heavy ; and in the Hadhramaut considerable destruction was caused to irrigation works from the resulting floods. The great Nuqra Dam, which had stood successfully for the previous two flood seasons, received the full weight of the combined floods of the Wadi 'Idim and Wadi Ser and was breached owing to a blow-up of the apron caused by excessive up-stream pressure.

241 The Saif rains were badly needed. They gave the cultivator, hard pressed through the previous bad season, a chance to grow grain and fodder crops with which to build up his condition in readiness for cultivation in the Kharif season.

132 *Kharif Rains Season.* Rain followed close on the finish of the Saif, and in almost all districts the rainfall was sufficient for the needs of the cultivator. In November, 1949, the Protectorate was blessed with that rare visitation, a general winter rainfall, which fell with exceptional heaviness, particularly in the north-eastern areas from Beihan across

7: Gt. Brit., Colonial Office G-3 (1949-50) 1951 MM1 Aden
Hadhramaut min2

to the Hadhramaut. This winter rainfall enormously improved the range conditions over the mountain areas of the Protectorate and produced exceptionally good pasturage for the desert tribes in the north-east.

Large acreages of winter cereals and fodder crops were grown. The year finished with the whole of the Protectorate in good condition.

Livestock started the year in many areas in a starved condition, and in the east with their numbers greatly reduced. At the end of 1949 their condition was restored, but numbers, particularly of small stock, were low.

Plant Pests and Diseases

As a result of the favourable rains and the continuance of sorghum cultivation through the Saif season, to the flood crop of the Kharif, and into the lift irrigated crops planted in autumn, 1949, there was a serious increase in the stalk borer population, and an estimated loss of up to 50 per cent of the crop resulted in the Hadhramaut lift irrigated areas.

Animal Health

No outbreak of rinderpest or other serious animal disease was recorded during 1949.

Market Conditions

With the devaluation of the pound the value of the Maria Theresa dollar rose nearly 30 per cent in relation to rupee currency. Produce prices remained high until autumn, 1949, when a sharp drop occurred in many districts following the good harvests. Sorghum grain on the Aden market averaged about £35 per ton throughout 1949.

Demonstration and Experiment

A field trial with X1730A cotton grown from Abyan raised seed was very successful in 1949; some 1,750 lbs. of seed cotton per acre was obtained from scattered plots totalling 82 acres which had received one watering only before planting. The crop was planted in the months of September and October, and grew rapidly. In some fields plants reached a height of over 6 feet and carried an enormous crop. No important pests or diseases were seen.

The crop was classified by the Chief Classifier of the Sudan Plantation Syndicate, who was flown over for the purpose; he placed about half the crop in grades 3 and 4, and the balance in grades 5 and 6, basing his classification on Sudan Gezira standard for L type cottons. The graded crop was sold to the Raw Cotton Commission.

Varieties of cane, introduced in small quantities from Mauritius in the previous season, were cut in September, 1949, and planted out in observation plots.

7: Gt. Brit., Colonial Office G-3 (1949-50) 1951 MM1 Aden
Hadhramaut MM2

CLIMATE

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311 The greater part of the Eastern Aden Protectorate consists of desert and barren mountains intersected by wadis, some of which are fertile and cultivated. There are a number of comparatively large towns, notably Mukalla, the capital of the Qu'aiti State and principal seaport, and Sai'un, the capital of the Kathiri State.

Chapter 12: Administration

631 The Eastern Aden Protectorate comprises the Hadhramaut (consisting
648 of the Qu'aiti State of Shihr and Mukalla, and the Kathiri State of
649 Seiyun), the Mahri Sultanate of Qishn and Socotra, the Wahidi Sultanates of Bir 'Ali and the Sheikhdoms of Irqa and Haura, all of which have been for many years in protective treaty relations with His Majesty's Government. His Highness Sultan Sir Salih bin Ghalib al Qu'aiti, K.C.M.G., Sultan of Shihr and Mukalla, is the premier chief in the Eastern Aden Protectorate, and the Hadramaut is the most important and best organised of these areas. It is bounded on the west by the Wahidi Sultanates and on the east by the Mahri Sultanate.

648 The Mahri Sultanate of Qishn and Socotra is the most easterly
631 area in the Aden Protectorate, being bounded on the east by the

8:Gt. Brit., Colonial Office G-3 (1951-52)1954 MM1 Aden
Hadhramaut MM2

PART VI

Chapter 1: Geography and Climate

GEOGRAPHY

131 The Aden Protectorate which can be more conveniently described
648 administratively and geographically by dividing it into two areas, the Western and Eastern, has a total superficial area of about 112,000 square miles. It is bounded on the east by the western boundary of the Sultanate of Muscat and Oman, on the north and west by the Ruba' al Khali (or Empty Quarter) and the Kingdom of the Yemen (whose southern boundary was temporarily established by Article III of the Treaty of Sana'a of 11th February, 1934, by which His Majesty's Government and the Government of the Yemen agreed to maintain the *status quo* as on the date of the signature of the treaty), and on the south by the Gulf of Aden and the Indian Ocean. The Aden Protectorate seaboard starts at Husn Murad (opposite Perim) on the west, and runs for 740 miles eastwards to Ras Dhurbat Ali, where it meets the frontier of the Sultanate of Muscat and Oman.

133 The Western Protectorate is divided into the littoral belt which varies between four and 40 miles in depth; the maritime ranges about 1,000—2,000 feet above sea-level; the intramontane plains over 3,000 feet high; and the highland plateau which ranges from 5,000 to 8,000 feet high and falls away into the Ruba' al Khali (or Empty Quarter) with a mean altitude of 2,500 feet. The country between the littoral belt and the intramontane plains and the plateau is a tangle of mountains, ravines and valleys. Some of the valleys are very fertile. The plateau itself is broken up by numerous hills and mountains and is intersected with several deep valleys.

The greater part of the Eastern Protectorate consists of desert and barren mountains intersected by wadis, some of which are fertile and
361 cultivated. There are a number of comparatively large towns, notably Mukalla, the capital of the Qu'aiti State and principal seaport, and Sai'un, the capital of the Kathiri State.

CLIMATE

132 The maritime plains are damp and hot in the summer, and are subject to sandstorms and high winds. In the winter (October to the end of March) it is cool and sometimes cold at night and much less damp.

In the mountains, which vary in height between 1,500 and 8,000 feet, it is drier and cooler during the day and night; at above 4,500 feet it can be very cold.

In the Wadi Hadramaut and the intervening tableland or "Jol", extremes of both heat and cold are encountered. The heat, in contrast to that of the coast, is dry, but more intense. The rainfall is small.

8:Gt. Brit. . Colonial Office G-3 (1951-52)1954 MM1 Aden
Hadhramaut MM2

There is little rainfall in the littoral and maritime hills ; here cultivation is chiefly dependent on irrigation from water channels and courses. In the highlands well irrigation is common and there is heavier rainfall, which is led down ravines and defiles into terraced fields.

Chapter 2: History

For a time in the eighteenth century, the Western Protectorate formed part of the domain of the Imam of Sana'a in the Yemen and several of the rulers of the tribal districts were the Imam's "wakils" or governors until his power declined and they declared their independence.

After the occupation of Aden by the British in 1839, some of the neighbouring chiefs entered into protective treaty relations with Her Majesty's Government. Others followed suit as time went on, the last to do so being the Audhali Sultan in 1914.

In July, 1915, during the first World War, the Turks, who had conquered the Yemen in the course of the previous century, occupied the Abdali, Haushabi and Amiri districts of the Protectorate until the Armistice of 1918.

In 1934 a Treaty of Friendship was signed between His Majesty's Government and the Kingdom of Yemen. There was an Exchange of Notes in 1950 when it was agreed to establish reciprocal diplomatic missions and to set up a Frontier Commission.

In 1944 and 1945 five Western Aden Protectorate Chiefs (the Fadhli, the Lower Aulaqi and the Lower Yafa'i Sultans, the Sharif of Beihan and the Amir of Dhala) entered into closer relations with His Majesty's Government by new treaties in which they agreed, *inter alia*, to abide by the advice of the Governor of Aden in the improvement of their administrations. Similar treaties were signed by the Upper Aulaqi Sheikh and the Audhali Sultan in 1952. In 1952 the newly elected Sultan of Lahej accepted a Political Officer as adviser and signed an advisory treaty.

The most important aspect of recent history in the Eastern Protectorate has been the decline of the traditional power of the Kathiri Sultans and the rise of the Qu'aiti—a new Yafa'i dynasty which gained power and wealth from military and other services rendered by its members abroad to the Nizam of Hyderabad. The Qu'aiti rulers first entered into a treaty with Her Majesty's Government in 1882. This was strengthened in 1888 by the conclusion of a Protectorate treaty in the common form of the treaties with other Protectorate chiefs. In 1918 the Kathiri Sultan made an agreement with the Qu'aiti Sultan acknowledging this treaty as binding on them also. In 1937 and 1939 respectively the Qu'aiti and Kathiri Sultans signed treaties undertaking to accept the advice of a British Resident Adviser in all matters except those concerning Mohammedan religion and custom. The Wahidi Sultan of Belhaf signed an Advisory Treaty in 1949.

30: Gt. Britain G-5 (ca. 1918) 1920 MJ1 Saudi Arabia
Hadhramaut MM21

133 the greater part of the year, in certain places. These interruptions are due to the entire volume of water—which in dry seasons is not very considerable—being led off into the cultivation and returned again lower down. It is said that the waters of the Tiban, like those of the Bana, occasionally reach the sea after abnormal floods. The Bana River runs continuously from May to October.

The coast-line generally is low and sandy and devoid of promontories or inlets of any size, except at Aden, where craterous promontories rise to about 1,700 ft. above sea-level, forming sheltered bays, and at a point some sixty miles west of Aden, where a spur of the Yemen highlands approaches the coast at Khōr 'Umeirah.

Climate

• 132 In the first zone—the littoral—the heat in general is excessive, but the climate is not unhealthy for those who can stand the fierce heat of the day, and the nights are cool. The cultivated oases and [164] river-beds, however, which afford grateful shade by day, should be avoided as fever traps, and the Tiban valley and Lahej oasis 241 in general have an ill name for malaria of a malignant type. The only rainfall is afforded by a few showers in mid-winter. Cultiva- 311 tion depends chiefly on irrigation from the wādi water-courses, and consists almost entirely of millet, *jowari*, and tall fodder crops such as *kirbi*.

In the second zone—the maritime hills—the rainfall is as in the first zone; but there is no opportunity for wādi irrigation, and in consequence scarcely any crops are raised. The air is stifling by day and damp at night.

In the third zone—the intramontane plains—the rainfall takes place during the summer in occasional thunderstorms. The crops are millet and maize, and they become more abundant and fertile as the main watershed is approached. The heat here, again, is very great.

In the fourth zone—the main watershed—there is a considerable rainfall during the summer months, and a bracing and fairly equable climate with sometimes a degree or so of frost at night. Cultivation is scanty, chiefly barley and a few light fodder crops.

In the fifth zone—the plateau—water lies within ten feet or so of the surface, and there is a good deal of irrigation from wells, besides the regular rainfall. This is small, but from October to March the region is liable to dense white fogs which fall after dark and lie thick to 9 a.m. They will wet one through in an hour, but are invaluable to the farmer as they alone keep the crops alive till

39: Gt. Britain G-5 (ca. 1918) 1920 MJ1 Saudi Arabia
Hadhramaut MM2

the summer thunderstorms are due. These latter are often extremely violent, even terrifying. Hail occasionally falls. Harvesting of one crop or another goes on throughout the year—chiefly bearded wheat, barley, maize, lucerne, and coffee (but the latter is less frequent than over the Yemen border). Indigo and cotton (a very small bush) are grown in the Nisāb district and grapes on the Yemen border.

In the sixth zone—the Empty Quarter or Great Red Desert—the population is pastoral and follows the grazing according to the rainfall, which is irregular and scanty. Along the principal wādis, which lead north towards the desert, there are permanent settlements and cereal crops are raised, chiefly millet, the stalks of which make useful fodder when grazing is scarce. The semi-nomadic part of the population returns to the settlements to await the next grazing-season in the desert.

In the Aden Interior as a whole the prevailing diseases are small-pox, fever (especially malarial), and, to some extent, consumption. The 'Yemen ulcer' is also common among the tribes.

Population

The population of the Aden Interior (considered as a whole, and including that portion known strictly as the Aden Protectorate), settled and nomadic, may be computed at about half a million. The district is composed of a number of Tribal Confederations or Sultanates, some lying within the limits of the Protectorate proper, some without.

The limits of the Aden Protectorate proper are the delimitation line, previously mentioned, from Ras Turbah to a point some few miles north of Dhāla, and thence a somewhat vaguely defined line continuing at first in a south-easterly direction and then in a generally easterly direction to the coast of the Gulf of Aden near the small settlement of Maqātīn. They enclose an area of about 4,200 sq. miles, having a population of 100,000. The tribal confederations lying within this boundary are: the Subeihi, 'Abdāli, Fadhli, Haushabi, Amiri, 'Alawi, 'Aqrabi, and other smaller tribes; and without are the Yāfa', 'Aulaqi, Beida, Oleh, and 'Audillah ('Audali). The tribes of the Protectorate have a larger proportion of non-combatants and are more settled than those of the remoter interior; the bulk are to be found in the towns and villages of the littoral belt, the chief centres being Lahej, Waht, Shūghrah, and the Abiyān district.

In dealing with a variety of tribes with such different characteristics it is difficult to generalize; broadly they may be divided

30: Gt. Britain G-5 (ca. 1918) 1920 MJ1 Saudi Arabia
Hadhramaut MM21

tremely fertile, for though they have no visible perennial water-courses, water is very abundant in the subsoil throughout the system and is procurable almost everywhere by sinking wells; this is eminently the case in the main Hadhramaut wādi, or at least over a considerable part of its length, where vast reservoirs of water are available at little depths below the surface, at all times of the year, for the irrigation of comparatively large and continuous tracts of land. The last hundred miles or so of the main wādi are, however, desert, owing to the almost complete absorption of the water higher up for irrigation purposes; the oasis tracts are thus removed from direct contact with the sea. The chief tributary wādis, naming them from west to east, are the 'Irmah, Rashah, 'Amd, Dō'an, and 'Aisār, all of which join to form the Kesr; the 'Ain, Bin 'Ali, and 'Adam, all eventually leading into the main Hadhramaut Wādi. 133

(c) The scarped belt, skirting the main wādi to the north, and penetrated in parts by shorter tributary wādis, is calcareous and arid, and to a certain extent screens the main depression from the formidable desert tract beyond, which, however, makes encroachments on this depression.

Climate

The district as a whole is hot except on the elevated plateau. The climate of the coastal tract is extremely hot and enervating (intolerably so in summer) owing largely to the aspect of the coast, which is almost due south, and to the elevated region by which it is backed; the heat is especially oppressive when, as not infrequently happens, there are no sea-breezes. Bent describes the air of the tableland as 'fresh and invigorating after the excessive heat of the valleys below', and he mentions Sujeila, at an altitude of 3,150 ft., as 'having excellent air that would make it a first-class sanatorium for Aden'. But this upland appears to be subject, at certain seasons, to a cold, penetrating wind, to cold and dewy nights, and to very great extremes of temperature. 132

Twice during the year the coastal districts, at all events, of the Hadhramaut receive their share of the rains brought by the monsoons, though probably in a less degree than the Yemen. But the regularity of the rains in the interior is not so certain, for when the Bents visited the Wādi Sirr in 1894 they were told by the inhabitants that they had had no rain for two years, and that they were sometimes without any for as much as three years at a time. Thunderstorms of a very sudden and violent nature are recorded by travellers, these being usually preceded by fierce heat and hot and violent

30: Gt. Britain G-5 (ca. 1918) 1920 MJ1 Saudi Arabia
Hadhramaut MM2

of Sheikh 'Othmān and small village of Hiswah on the north-east, at a radius roughly of ten miles from Aden town. The island of Socotra, in the Arabian Sea, passed under the protection of the British Government in virtue of a treaty concluded with the Sultan of Mahrah in 1886 (p. 205).

The peninsula of Aden proper is an irregular oval, 15 miles in circumference, with a diameter of from 3 to 5 miles, connected with the mainland by a neck of land about 1,350 yards wide, but at one place nearly covered at high spring tides. The causeway and aqueduct, however, are always above, although at some seasons only just above, water level. The peninsula consists of a huge crater walled round by precipices, the highest point being 1,775 feet above the sea; and rugged spurs, with valleys between, radiate from the centre. A great gap in the circumference of the crater has been rent on its eastern sea-face by some later volcanic disturbance. The town of Aden and part of the military cantonment lie within the crater, and consequently are surrounded on all sides by rocky hills. Lavas, spongy breccias, and tufas form the materials of this volcanic fortress. The natural vegetation is very scanty and resembles that of Arabia Petræa.

The average shade temperature of Aden is 87°—the mean monthly range being from 75° in January to 98° in June, with occasional variations up to or exceeding 102°. The lulls between the monsoon periods, in May and September, are specially oppressive. The mortality among Europeans, although greatly increased by the sick or dying from the passengers and crews of ships, amounts to only 7·2 per thousand. Aden, in fact, ranks as a rather healthy station for troops, though on first arrival they are subject to sandfly-fever, and it is a well-ascertained fact that long residence impairs the faculties and undermines the constitution of Europeans. The climate during the north-east monsoon, or from October to April, is cool and pleasant, particularly in November, December, and January. During the remainder of the year (the period of the south-west monsoon), hot sandy winds, known as *Shamāl* (north), prevail within the crater, but on the western or Steamer Point side the breezes come directly off the sea and are fairly cool. The rainfall may be said to vary from ¼ inch to 8½ inches, with an irregular average of about 3 inches; the irregularity and smallness of the yearly rainfall is borne out by the fact that the tanks, since their restoration in 1856, have only been filled six times—in May 1866 and 1870, and September 1877, 1889, 1893, and 1897. The Settlement is exceptionally free from infectious diseases and epidemics. The absence of vegetation, the dryness of the soil, and the

30: Gt. Britain G-5 (ca. 1918) 1920 MJ1 Saudi Arabia
Hadhramaut MM21

132 whirlwinds, from all sides, which disturb the dust. According to the Arabs, a particularly hot windless period of about forty days occurs with the changing of the monsoons. All travellers in the Hadhramaut make frequent allusions to the intensely high temperatures experienced in the narrow confined wādis of the interior.

164 Van den Berg says: 'Sicknesses are relatively few, which is quite natural, seeing the simple life led by the people, the pure and generally dry atmosphere of the mountains, and the total abstention of the people from pork, opium, and alcohol. Cholera is unknown, small-pox is never epidemic, but consumption is rampant, and there are cases of leprosy.'

Population

162 The total population of the Hadhramaut is extremely uncertain, and the various authorities give very divergent estimates. Mons. Babahir, whom Van den Berg cites as having had considerable facilities for judging, estimates it at about 150,000, which he distributes as follows:

From Shibām to Shabwah, including Wādis 'Irmah, Dahr, and Rashah	20,000
Wādis 'Amd, Dō'an, and 'Ain	25,000
Shibām to Terīm (inclusive)	50,000
Terīm to Seihūt	6,000
From N. of the main wādi to the desert	15,000
From S. of the main wādi to the sea	16,000
Shiheir, Makalla, and their environs	18,000
Total	150,000

Van den Berg, however, considers this estimate to be excessive, seeing that the greater part of the region is uninhabitable and unsuitable for agricultural pursuits of any kind. He himself gives the total of the chief centres of population of the interior, viz. Seyyūn, Terīm, Shibām, Ghurfah, and 'Aināt (or 'Ināt), as certainly not exceeding 29,500.

144 The people are known as *Hadhrami* and belong generally to the South Arabian stock, claiming descent from Ya'rab ibn Qahtān. There is, however, a large number of 'Seyyids', or descendants of the Prophet (described more fully below), and of 'townsmen' of northern origin, besides a considerable class of African or of mixed descent. But in spite of these variations the Hadhrami form, geographically and socially, a remarkably homogeneous whole.

H 442 648 [635] are bound by protective treaties with Great Britain. Administratively, it is divided into two areas, the Western Aden Protectorate, covering roughly 45,000 square miles in the southwestern highlands, and the Eastern Aden Protectorate, which incorporates the remaining territory and the island of Socotra, about 150 miles from Cape Guardafui, the easternmost point in Africa.

H 133 The geography of the region is characterized by mountains and high plateaus which slope to a sandy plain along the coast and are intersected by deep and often fertile valleys. The topography of Western Aden Protectorate is particularly rugged. Four zones are differentiated: the littoral; the coastal hills reaching up to 2,000 feet in height; the inland plains, with slightly higher elevations; and the interior plateau, at an altitude of 5,000 to 8,000 feet. The dominant feature of the Eastern Aden Protectorate is the Wadi Hadhramaut. The valley, which is broad and well defined, parallels the coast for almost 200 miles before turning southeast toward the sea. It is hemmed in by massive plateaus, with an average elevation of 6,000 feet in the south and 3,500 feet in the north, which are terraced and dissected by numerous secondary wadies. The main valley lies over 100 miles inland, and is separated from the coast by a complex terrain of mountains, steppe and desert.

H 132 Few meteorologic observations have been recorded. Extreme heat, accompanied by high humidity, is encountered in the coastal region during the summer; slightly moderated temperatures at the time of the northeast monsoon, from October to April.

A 132 The mean temperature in the Colony is estimated at 80° F.; 75° F. in the winter and 90° F. in the summer. The daily range is slight in the summer, but cool and sometimes cold nights are experienced during the winter months. The temperatures in the interior vary with the altitude and the season. Marked contrasts exist between the heat of the shut-in wadies and the cooler temperatures of the high plateaus. The rainfall is

A 132 scanty and irregular throughout most of the region. At Aden, it averages about 3 to 5 inches a year, and is normally concentrated in the period from December to April. In contrast, the western highlands receive a summer rainfall which reaches 15 to 20 H 132 inches a year in most areas. The precipitation in the Hadhramaut region does not follow a seasonal pattern: it is appreciably lower and often localized in distribution. Torrential thunderstorms sometimes occur, while sandstorms are frequent, especially between May and September.

POPULATION AND SOCIO-ECONOMIC CONDITIONS

Population

A 161 162 361 The population of the Colony is essentially cosmopolitan and urban in character. According to the last census in 1946, the inhabitants numbered 80,516, including 58,455 Arabs, 7,273 Jews, 4,322 Somalis, 9,456 Indians, 365 Europeans and 645 of other nationalities. Since that date the population has increased markedly. In 1950, it A 161 167 563 was officially estimated at 100,000 and was generally believed to approach 110,000 to 120,000. The Arabs are mainly immigrants or descendants of immigrants from the Protectorate and Yemen: in 1946, slightly less than one half were registered as Alen-born. Most of the Jewish community has recently migrated to Israel, with the result that a remnant of less than 2,000 Jews remained in 1951.

A 632 162 The Colony consists of two incorporated townships, besides important military installations. The township of Aden, sometimes designated as the Fortress, embraces all the settlements on the Aden peninsula and isthmus. It had over 55,800 inhabitants in 1946, about 36,200 of whom lived in the main town of Crater and 12,000 in the modern harbor sections of Tawahi and Steamer Point. Sheikh Othman, the second township, had about 22,600 residents. It comprises the town itself, situated on an oasis behind the peninsula, several small out-